

ABSTRACT OF THE DISCLOSURE

This invention relates to apparatus particularly a monolith catalytic reactor in a stirred tank reactor. The stirred tank reactor including the fixed bed catalytic reactor apparatus comprises:

an housing having an open top and open bottom portion supportably maintained with said tank, said housing having a substantially outwardly extending, horizontal baffle near its top portion said baffle having a least one perforation in its surface, and said housing having at least one perforation in the wall near its top portion;

a fixed bed catalyst system supportably retained within said housing permitting both liquid and gas flow therethrough; and,

an agitator shaft terminating in a turbine blade substantially adjacent the perforation in the wall of said housing, said agitator having a passageway including an opening in an upper portion thereof to the interior of an upper part of said tank and terminating in an opening adjacent the turbine blade.